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ABSTRACT

This study was conducted to examine the educational aspirations and course enrollment practices of a sample of California high school sophomores. In May 1988, 10th grade students (N=2,949) enrolled in 46 high schools in California completed questionnaires on background characteristics; educational aspirations and post-high school plans; career objectives; course enrollments in mathematics and science; involvement by parents, teachers, and counselors in course enrollment decisions; and attitudes toward school, course decision making, and achievement motivation. The findings revealed that the students had high aspirations, with 50% planning to attended a four-year college in the 2 years following high school graduation. Hispanic students had lower aspirations, lower enrollments in college preparation classes, and lower grade point averages than did Blacks, Whites, or Asians. While 65% of the students had a career goal, many lacked congruence between their career goal and their high school program. The findings suggest that students need to begin receiving information on educational and career planning in the eighth grade and need to continue receiving such information throughout high school. Students also need to be provided with opportunities to move from non-college preparatory courses to college preparatory courses through tutoring, extra coursework, or special transition courses. (The Student Questionnaire, 22 tables, and 5 figures are appended.) (NB)

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Course Enrollment Practices of High School Students in California

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EXECUTIVE SUMMARY

A study was conducted to examine the educational aspirations and course enrollment practices of a sample of California high school sophomores. The study addressed the following issues:

- What are the educational and career aspirations of tenth grade students? To what extent are students' course-taking patterns consonant with their goals?

- What is the role of counselors, teachers, and parents in helping students select appropriate high school courses and guiding them toward developing their full educational and career potential?

Surveys were completed by 3,000 students in May, 1988. The report includes the following findings:

- California sophomores had high aspirations. Fifty percent planned to attend a four-year college in the two years following high school graduation. Nearly 75 percent planned to attend either a two-year or a four-year college.

- Parental expectations for their children were very high. Nearly 80 percent of students indicated that their parents wanted them to attend college.

- Hispanics appeared to be at the greatest risk of not reaching their full potential. They had lower aspirations, lower enrollments in college preparation classes, and lower grade-point averages than did blacks, whites, or Asians.

- Sixty-five percent of these sophomores had a career goal; however, for many students there was a lack of congruence between their career goal and their high school program. Nearly half of the students taking general education courses rather than college preparatory courses had career goals which required at least a four-year college degree.

- Parents appeared to have a great deal of impact on the courses their children take. Students reported that parents were the most frequent source of information regarding course enrollment decisions. However, most parents had little direct contact with school personnel and may not be well informed regarding either the educational program at high schools or postsecondary options.

- Students pursuing general educational programs took easier courses, received lower grades, and were less positive concerning their educational experiences than were college preparatory students.

The following recommendations are made:

- Secondary schools and postsecondary institutions need to place greater emphasis on increasing the percent of ethnic minority students preparing for college. Each secondary school should examine data on student aspirations, course enrollments, and college-going rates for each ethnic group in attendance. Targets should be set for improvement and the strategies to reach improvement goals and the means and time frame for evaluation should be established. The results reinforce the importance of efforts by the California State Department of Education, school districts, and colleges and universities to establish programs and strategies to increase the number of underrepresented minorities, especially Hispanics, preparing for college.

- Students need to begin receiving information on educational and career planning in eighth grade and continue receiving information throughout high school. Students need information regarding the needs of the work force in the 21st century, career counseling, the educational requirements of various careers, and information regarding financial aid.

- There is a need to reexamine scheduling practices in middle grades and high schools so that students who enroll in one non-college preparatory class (e.g., general math) are not automatically enrolled in other classes in the same track. Students need to be provided with opportunities to transition from non-college preparatory courses to college preparatory courses through tutoring, extra coursework, or special transition courses.

- Given the high educational aspirations of students, high school staff and outreach personnel should concentrate their efforts on getting students to enroll and succeed in college preparatory courses rather than simply raising aspirations. The one exception to this is the need to address the educational aspirations of Hispanics, which were lower than the aspirations of other ethnic groups.

- In preparing students for success in college preparatory courses, advising or counseling needs to be both assertive and supportive. In order to increase the percentages of students enrolling in colleges, particularly economically disadvantaged and minority students, school staff should ensure that students receive individual guidance and support on a regular basis by individuals concerned about each student.

- Because of the critical role of parents in influencing course enrollment decisions, it is imperative that schools work with parents to prepare them to provide more informed guidance to their children. A good resource for schools is Parents as Partners: Planning Early for Your Children's School Success and College Attendance, a joint publication of the California State Department of Education, the University of California, and the California State University. In addition, counselor and teacher preservice and in-service programs need to provide strategies for developing positive relationships with parents.

INTRODUCTION

Background

In recent years, considerable effort has been directed toward upgrading the educational program for high school students. Statewide high school graduation requirements were mandated by Senate Bill 813 (Chapter 498, Statutes of 1983), and model graduation requirements were proposed and adopted by the State Board of Education in 1983. The class of 1988 was the first class required to complete the new high school graduation requirements. The model graduation requirements, which are more rigorous than the mandated high school requirements, include three years of math, including Algebra I and geometry; two years of science; four years of English; and two years of foreign language. In tandem with the increased graduation requirements were efforts to provide a common core curriculum and to upgrade the content of all high school courses. Model curriculum standards and new curriculum frameworks developed by the California State Department of Education provided guidance to schools concerning desirable course content.

Studies conducted by the California State Department of Education (Study of the Implementation of the Model Curriculum Standards in California High Schools; George, 1987) and by Policy Analysis for California Education (State Education Reform Can Improve Secondary Schools; Odden & Marsh, 1987) have shown that graduation requirements have been increased and that schools have begun to revise their curricula.

In addition to efforts to upgrade standards, there has also been interest in increasing the percentage of students going on to colleges and universities, particularly black and Hispanic students, who have been underrepresented in college enrollments. The California Postsecondary Education Commission found that only 11 percent of black seniors and 13 percent of Hispanics qualified for admission to the California State University in 1986 compared to 32 percent of whites and 50 percent of Asians. Statewide, less than one-quarter of 1986 graduates completed the college preparatory (a-f) course sequence, with much lower rates for blacks and Hispanics (California Postsecondary Education Commission, 1988). Clearly, issues of access to high-level courses need to be addressed as well as the quality of courses offered throughout the curriculum.

In a study of the California high school curriculum conducted in 1981-82 prior to the implementation of these high school reforms (Paths Through High School; Sanders, Stone & LaFollette, 1987), it was found that students in the remedial and basic tracks received a less well coordinated and less challenging program of study than did those in college preparatory tracks. Recent studies have shown that even with the reforms described above, there is evidence that many students, particularly those in lower-level classes, are not receiving the type of challenging core curriculum envisioned by curriculum reformers. A recent evaluation of pilot projects aimed at increasing the numbers of minority students

preparing for college (George, 1988) found that large numbers of minority students at the participating high schools would not have been placed in college preparatory courses though normal registration procedures.

In a national study, Powell, Farrar, and Cohen (1985) describe the wide variety of course options for students and the limited guidance students receive in planning their course of study. In California, it was reported in Paths Through High School that:

> The classes that students choose, the ways in which they chose them, and the extent to which they receive counseling, information, and support from their schools are largely functions of the tracks to which they have been assigned. The initial placement in a track and the suggestions for courses are mainly the responsibility of the school counselors. However, the amount of individual attention each student receives varies depending on the counselor/student ratio in a particular school.
>
> In the schools surveyed, the counselor/student ratio ranged from 1 to 239 to 1 to 540. The average ratio was 1 to 369, with one school reporting having no counselors. Such heavy work loads severely limit the amount of time any school staff member devotes exclusively to assessing students' needs and planning appropriate programs of study. In fact, counselors reported that they spent the most time with students in the lower and upper tracks.

The tenth grade counseling program, a part of Senate Bill 813, was designed to ensure that every student receives a review of academic progress and counseling related to educational options by the end of tenth grade. It was hoped that, by providing this checkpoint, students would be better prepared for their next step after high school, whether it be postsecondary education or employment. Under this program, priority was to be given to students not progressing toward graduation and those that have the ability to achieve higher goals, such as college, but who are not in a college preparatory sequence.

Purpose

The purpose of this study was to examine the educational aspirations and course enrollment practices of California high school students. The study addressed the following issues:

- What are the educational and career aspirations of tenth grade students? To what extent are student course taking patterns consonant with their goals?
- What is the role of counselors, teachers, and parents in helping students select appropriate high school courses and guiding them toward developing their full educational and career potential?

The remainder of the report is divided into nine sections: methodology; background characteristics of the sample; the educational aspirations of sophomores; high school programs of students; participation of parents, teachers, and counselors in the guidance of students; student attitudes; comparison of results for college preparation and general education students; comparison of results for two groups of college preparatory students; and summary and recommendations.

METHODOLOGY

A tenth grade student questionnaire was developed for use in this study. A copy of the questionnaire is included in Appendix A.

The questionnaires were administered at a stratified random sample of 50 high schools in May, 1988. Schools were divided into three groups on the basis of the combined percentage of black and Hispanic enrollment. Because it was important to compare the experiences of black and Hispanic students to those of white students, schools with a large proportion of black and Hispanic students were deliberately oversampled. Schools with a high combined percentage of black and Hispanic students represented 11 percent of the state but one-third of the sample. The number of schools selected from each group and the return rates are shown in Table 1. Questionnaires were returned from 46 of the 50 schools sampled, representing a school return rate of 92 percent.

Table 1

Sample Characteristics of Schools and Return Rate

Combined Percentage of Black and Hispanic Enrollment	Number of Schools in Sample	Number of Schools Responding	Percent of Schools Responding	Number of Surveys Returned
Enrollment				
Low (<21%)	16	14	88%	971
Medium (21-60%)	17	16	94	1051
High (>60%)	17	16	94	927

The sample also needed to include information from students taking a range of courses from college preparatory to those taking remedial and basic courses. Each school was provided with a total of 99 questionnaires packaged into three class sets. Schools were asked to administer the questionnaires to three tenth grade English classes:

1) a college preparatory English class,

2) an English class that was appropriate for students taking general or regular education classes, and

3) a basic or remedial English class.

These criteria were adjusted to meet the needs of a few schools which did not have three levels of English classes in tenth grade. Tenth grade was chosen for administration in order to include activities resulting from the tenth grade counseling program.

The number of surveys returned per school ranged from 29 to 95, with an average number of 70 surveys returned per school. Although it was not possible to verify the administration procedures at the school level, it appeared that the class sets from basic or remedial English classes were smaller; thus this group probably represented less than one-third of the cases.

In all, 3,202 surveys were returned. Of this total, 253 surveys were excluded because the respondents indicated that they were not enrolled in tenth grade, resulting in 2,949 usable responses. Of the tenth graders, 1,215 were white students, 845 were Hispanic, 329 were black, and 255 were Asian. When the data are discussed separately for different ethnic groups, they are based on these numbers.

BACKGROUND CHARACTERISTICS OF SAMPLE

The background characteristics of students responding to the survey are shown in Table 2. As described in the methodology section, minority students were deliberately overrepresented in the sample. When the sample was compared to the statewide average for tenth grade, it was found to contain fewer white students than the statewide average and a slightly larger proportion of nonwhite students within each category.

Students were asked to indicate the educational level of each of their parents. Of the fathers, 14 percent had not graduated from high school, 19 percent had graduated from high school but had not gone to college, and 63 percent had some college. Fourteen percent of the students did not know the educational level of their fathers. The educational level of mothers was somewhat lower than that of the fathers. Seventeen percent had not graduated from high school, and 24 percent had graduated but had not gone on to college. A total of 48 percent had some college. Twelve percent did not know the educational level of their mothers.

The reported educational level of parents was compared to the statewide average. Because statewide data on parental educational level are collected through the California Assessment Program at only selected grade levels, it was necessary to compare the tenth grade data to another grade level, twelfth grade. Because of the different grade levels involved, the statewide data should only be used as a general estimate of the tenth grade average. Overall, the tenth grade sample contained students with more educated parents. Of the tenth grade sample, 44 percent had a college degree compared to 39 percent for the statewide twelfth grade average.

Of the tenth grade students, 18 percent had attended more than one high school. Of the students who had attended more than one high school by the end of their sophomore year, most (73 percent) had attended two high schools, and 19 percent had attended three high schools.

Thirty percent of students reported that they had a job outside of school. Over half of those working (54%) reported working 10 to 25 hours weekly, 15 percent worked more than 26 hours weekly, and 30 percent worked less than 10 hours weekly.

Table 2

Background Characteristics of Survey Respondents

Characteristic	Percent of Respondents	Statewide Average [a]
Sex		
female	51%	52%
male	49	48
Ethnic Background		
White	42	51
Hispanic	29	28
Black	11	9
Asian	9	8
Filipino	3	2
American Indian/Alaskan native	2	1
Pacific Islander	1	<1
Students who indicated they are members of two ethnic groups	3	--
Father's Education		
Not a high school graduate	14	--
High school graduate	19	--
Some college	19	--
College degree	19	--
Advanced college degree	15	--
Don't know	14	--
Mother's Education		
Not a high school graduate	17	--
High school graduate	24	--
Some college	22	--
College degree	18	--
Advanced college degree	8	--
Don't know	12	--
Education of More Educated Parent		
Not a high school graduate	13	14
High school graduate	18	20
Some college	25	25
College degree	25	23
Advanced college degree	19	16
No response	--	2

[a]The statewide average of sex and ethnic background is based on the California Basic Educational Data System (CBEDS) October, 1987, data collection for tenth grade students. The statewide average concerning educational level of the more educated parent is from the twelfth grade California Assessment Program survey, administered in fall, 1987. Statewide data are not collected separately for a mother's and a father's educational level.

EDUCATIONAL ASPIRATIONS OF SOPHOMORES

The postsecondary plans of respondents are shown in Table 1. Students were asked to indicate all activities in which they expect to be engaged in the two years following high school graduation. Nearly three-quarters of the sophomores indicated that they expected to attend either a 2-year or 4-year college. Seven percent of students indicated they plan to either get vocational training, serve in the military, or to work full time. Almost no one planned to be a full-time homemaker. Eight percent indicated that they did not know what they would be doing following high school.

The results were analyzed separately by ethnic group and are also presented in Table 3. The percent of students planning to attend 2-year and 4-year colleges is shown in Figure 1. Hispanic students were less likely to plan to attend college and were more likely to plan military service, full-time employment, or vocational or technical training. Hispanic students were also more likely to indicate that they had not made postsecondary plans than were white, black, or Asian students.

Table 3

Postsecondary Plans of Sophomores

Postsecondary plans	All Students (N=2949)	White (N=1215)	Hispanic (N=845)	Black (N=329)	Asian (N=255)
Attend a 4-year college	50%	50%	36%	62%	76%
Attend a 2-year college	24	28	27	14	12
Attend either a 2-year or a 4-year college	72	74	61	75	87
Get vocational/technical training	7	6	10	7	5
Military service	7	5	11	8	2
Work full time	7	6	10	6	2
Full-time homemaker	<1	<1	<1	1	0
Other	8	10	6	7	8
Do not know	8	7	11	5	5

Note: Students checked all responses that applied, so percentages do not total 100.

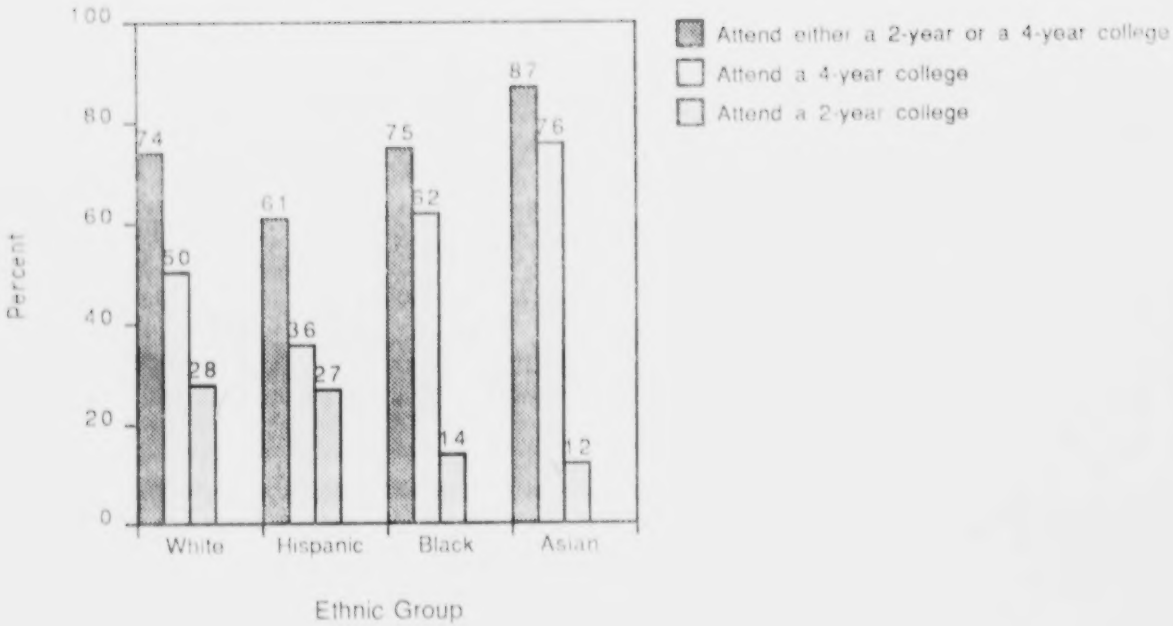

Figure 1. Postsecondary plans of high school sophomores, by ethnic group

For some perspective on the postsecondary plans of these sophomores, educational aspirations of students were compared to historical data on the attendance rates of different ethnic groups. This information is shown in Table 4. Data on college enrollments are based on California high school graduates in the state university system as freshmen in 1987. These data do not reflect students enrolling in private colleges and those enrolling in institutions outside of California. Direct comparisons between aspirations and enrollments cannot be made because the data are from two different groups of students. However, inasmuch as college-going rates have remained relatively stable, these data provide reasonable general estimates of future college-going rates.

Table 4

Comparison of Aspirations of Sophomores and
1987 College Attendance Rates

Aspirations and Attendance Rates	All Students	White	Hispanic	Black	Asian
Postsecondary Plans of Sophomores					
Attend a 4-year college	50%	50%	36%	62%	76%
Attend a 2-year college	24	28	27	14	12
Attend either a 2-year or a 4-year college	72	74	61	75	87
1987 College Attendance Rates [a]					
4-year college	17	16	10	13	34
UC	7	6	4	5	17
CSU	10	10	6	8	17
2-year college (Community colleges)	33	33	27	33	26

[a]1987 College attendance rates are based on information reported by the California Postsecondary Education Commission (California College-Going Rates, 1987 Update) regarding recent California high school graduates who enrolled in California public colleges and universities as freshmen in 1987.

Figures 2 and 3 display the aspirations of sophomores to attend 2-year and 4-year colleges with data on college enrollments in 1987. As is shown in the figures, there is a dramatic difference in the percent of students aspiring to attend a 4-year college and those actually enrolling within a few years after high school graduation. This discrepancy existed for all ethnic groups but was particularly troublesome for blacks, where 62 percent of sophomores indicated that they planned to attend a 4-year college. Yet the percentage of blacks who actually enrolled in California public 4-year colleges in 1987 was only 13 percent. Students from all ethnic groups were more likely to attend 2-year colleges than would be expected on the basis of high school plans.

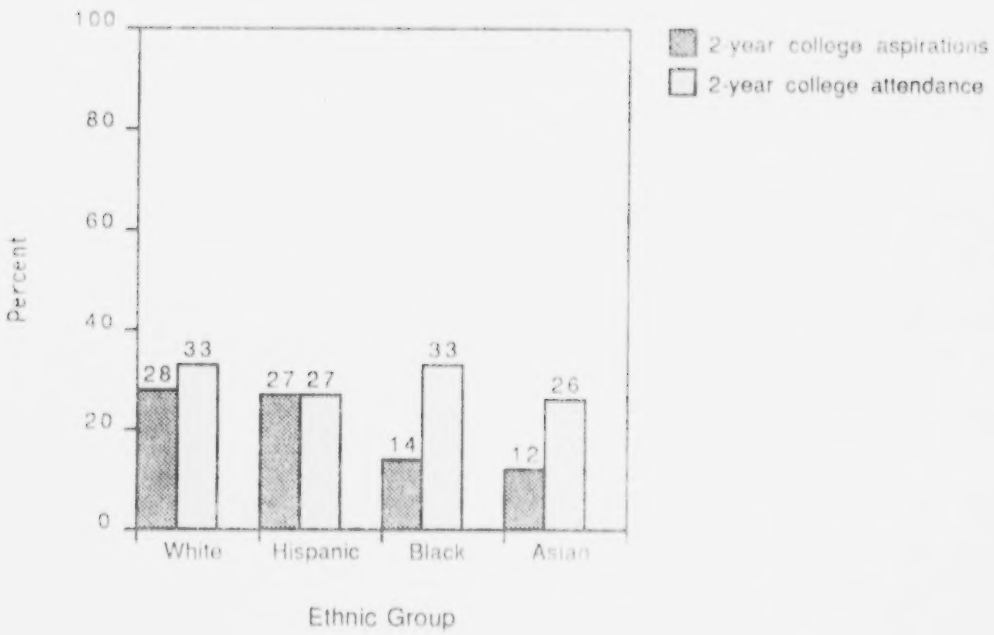

Figure 2. Comparison of aspirations to attend 4-year college with attendance rates, by ethnic group

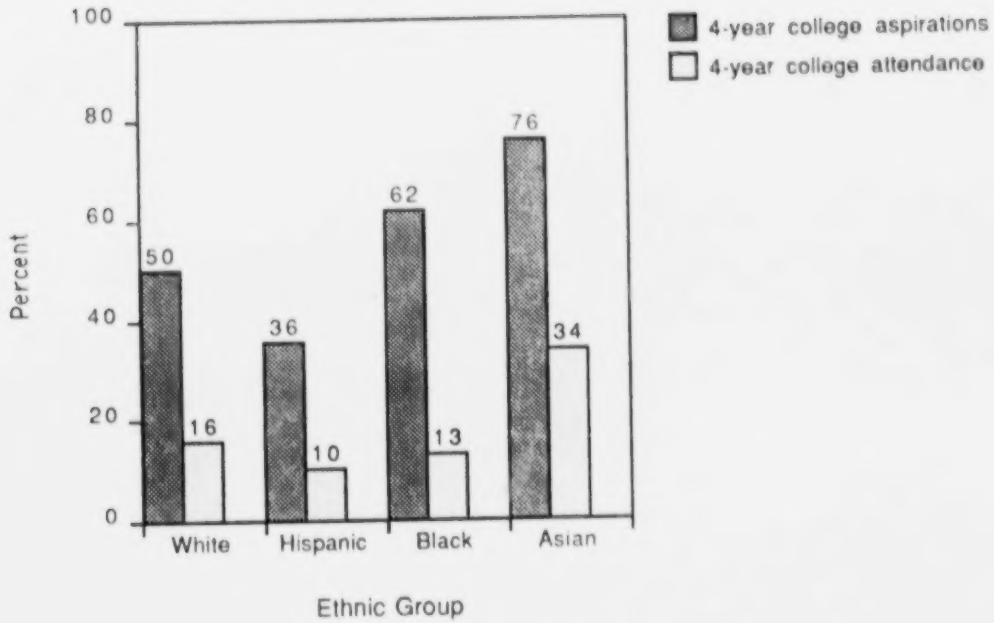

Figure 3. Comparison of aspirations to attend 2-year college with attendance rates, by ethnic group

Data from other states and from national studies present a similar picture of unmet expectations which is particularly acute for blacks. Gardner (1987) used the national "High School and Beyond" data base to examine the transition from high school to postsecondary education. The national study found that black male seniors were slightly more likely than white male seniors to expect to attain at least a 4-year degree. However, when these expectations were compared with actual college attendance 22 months after high school graduation, black males attended significantly less often than did white males. Exhibiting a similar pattern, black females were substantially more likely than other females to expect to attain graduate degrees but attended 4-year institutions less frequently than did white females. Two years later, when students were asked whether they had revised their expectations either upward or downward, the expectations of black students were found to be less stable than those of other students. For black students, it appears that educational aspirations are less accurate predictors of future enrollment than they are for other ethnic groups.

A statewide study (Pennsylvania Association of Colleges and Universities, 1984) of over 16,000 Pennsylvania freshmen and seniors conducted in 1983-84 also indicated that black students were more likely to plan on some form of postsecondary education (75%) than were white students (65%). The study did not involve follow-up concerning actual attendance.

Students were asked what educational level their parents aspired for them. The results are shown in Table 5. The overwhelming majority (78%) indicated that their parents wanted them to attend college.

The results revealed little differences when analyzed separately by ethnic group. Parental expectations were somewhat lower for Hispanic students, yet 61 percent of Hispanic students indicated that their parents wanted them to attend, if not graduate, from college. The results were also analyzed separately according to the educational level of parents. Parents with high levels of education had higher educational aspirations for their children; however, the vast majority of parents, regardless of their own educational attainment, wanted their children to attend college.

Table 5

Parental Expectations for Students' Educational Level

Educational level expected	All Students	White	Hispanic	Black	Asian
Not finish high school	1%	1%	2%	1%	1%
Graduate from high school but not go any further	4	3	7	3	2
Attend vocational, trade, or business school after high school	7	7	9	5	5
Attend college	12	9	16	12	10
Graduate from college	51	54	46	55	48
Attend graduate school	15	18	9	16	24
Don't know	10	8	12	9	11

HIGH SCHOOL PROGRAMS OF STUDENTS

The focus of the sophomores high school program is shown in Table 6. A large majority (65%) of students indicated that they were enrolled in college preparation classes. Twenty-six percent indicated that they were in a general or regular education program, six percent were in vocational education, and three percent made some other comment. The large percent of students indicating they were enrolled in college preparation classes was surprising, especially given the instructions for administering the survey, which involved administration to one college preparation class, one general education class, and one remedial education class. It is likely that many sophomores reported they were taking college preparation classes yet were unaware of or failed to take the entire college preparation sequence. When we asked students what math and science classes they were taking, 12 percent of the college preparation students were not taking a college preparation math class, and 24 percent were not enrolled in biology or chemistry.

Table 6

Focus of High School Program

High School Program	All Students	White	Hispanic	Black	Asian
College preparation	65%	68%	54%	72%	81%
General or regular education	26	23	36	21	14
Vocational-technical education	6	6	8	5	4
Other	3	3	2	2	1

There were differences in the educational programs of students from different ethnic groups. Asian students were more likely to take college preparatory classes, and Hispanic students had the lowest percentage enrollment in college preparatory programs.

The average high school grades of sophomores are shown in Table 7. Forty-three percent indicated that their grades were typically B's; 33 percent usually get C's. The remaining students got A's (16%) or had grades below C- (8%). Asian students reported that they had much higher grades, with over one-third earning A's. Hispanics and black students received lower grades; 53 percent of Hispanics and 48 percent of blacks were receiving grades of C or below compared to 36 percent of white students. The low grades of black students are inconsistent with their high educational aspirations.

Students were asked to identify the specific math and science class in which they were enrolled. Math and science were used over other curriculum areas because course titles and course levels are more consistent across schools than in a curriculum area such as English.

Table 7

Average High School Grades of Sophomores

Average High School Grades	All Students	White	Hispanic	Black	Asian
A- to A+	16%	19%	8%	9%	37%
B- to B+	43	46	39	43	53
C- to C+	33	30	43	39	9
Below C-	8	6	10	9	2

The mathematics and science course enrollments of sophomore respondents are shown in Table 8. As shown in the table, nearly all students were enrolled in a mathematics course. Geometry, algebra, and general math or pre-algebra each accounted for approximately one-quarter of the respondents. Hispanic students were underrepresented in upper-level mathematics courses.

Twelve percent of students were not enrolled in a science class. Nearly half of the respondents were enrolled in biology. Again, Hispanic students had the lowest percentage of enrollments in biology and more advanced science courses.

The percent of students enrolled in college preparation mathematics and science are displayed in figures 4 and 5. For sophomores studying mathematics, college preparation courses included algebra, intermediate or advanced algebra, geometry, and trigonometry. In science, biology, advanced biology, and chemistry were considered college preparation courses.

Since the passage of "pass-to-play" legislation in 1986 (Assembly Bill 2613, Chapter 422, Statutes of 1986), secondary students are required to maintain a grade point average of 2.0 to participate in extracurricular and cocurricular activities, including athletics. Students were asked whether the need to be eligible for sports or school activities had affected their course enrollment decisions. Twelve percent indicated that they had taken easy courses in order to keep their grade point average up to maintain eligibility for sports or school activities. The results were similar for each of the four ethnic groups.

Table 8

Mathematics and Science Course Enrollments

Enrollments	All Students	White	Hispanic	Black	Asian
Mathematics					
No Mathematics	28	38	38	14	14
General/Pre-algebra	22	17	35	20	8
Algebra	26	24	30	28	13
Inter./Adv. Algebra	11	10	7	14	26
Geometry	28	34	18	28	34
Trigonometry	5	6	2	3	11
Other mathematics course	6	6	6	6	9
Science					
No Science	12	12	17	7	5
Life/Physical Science Earth Science	22	21	33	16	8
Biology	48	51	38	57	56
Advanced Biology	5	5	4	6	9
Chemistry	5	4	2	7	14
Other science course	7	8	5	8	9

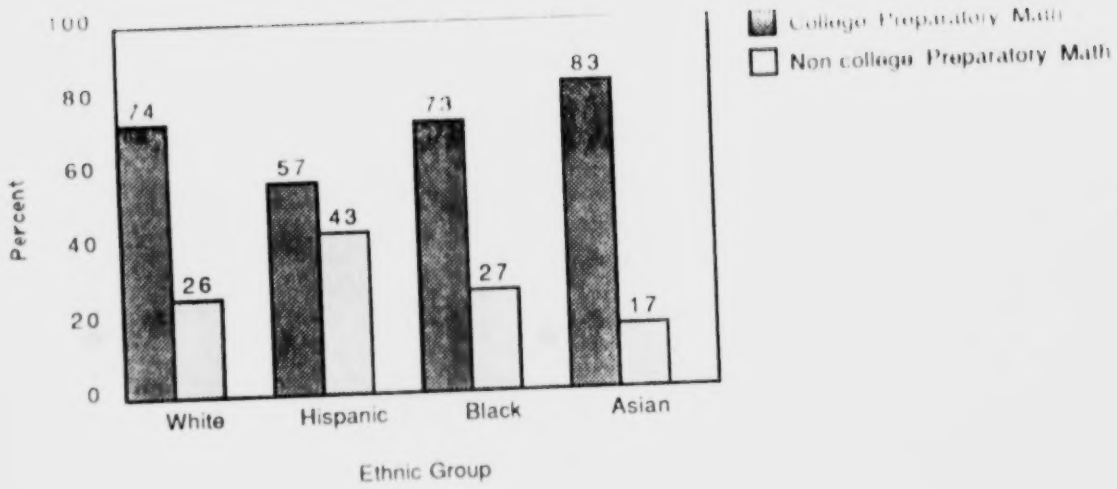

Figure 4. Course enrollments in mathematics, by ethnic group

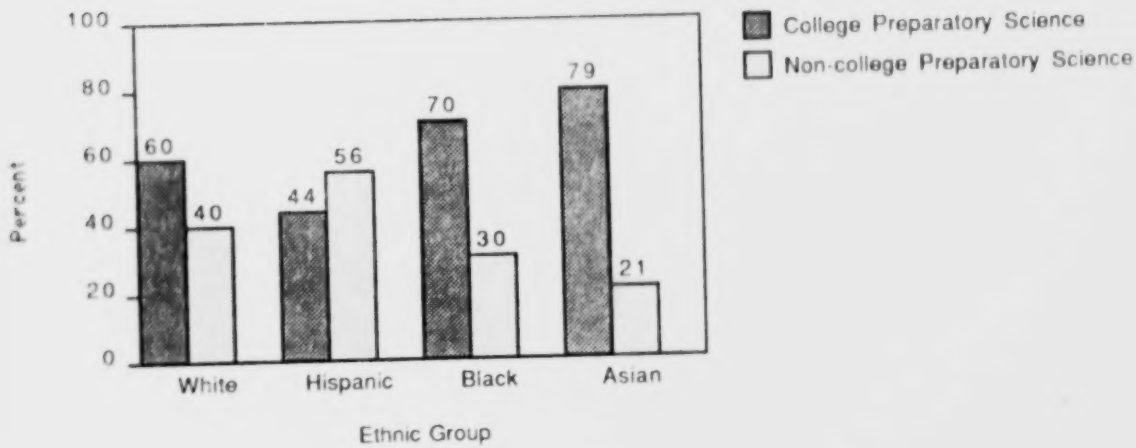

Figure 5. Course enrollments in science, by ethnic group

PARTICIPATION OF PARENTS, TEACHERS, AND COUNSELORS IN THE GUIDANCE OF STUDENTS

Students were asked to rate the frequency with which they ask parents, teachers, counselors, and other students for information regarding what courses to take. As shown on Table 9, students reported that parents are the most frequent source of information, followed by other students, and counselors. Teachers were the source of information least frequently used by students regarding what courses to take.

Table 9

Frequency with Which Students Ask Various Sources for Information Regarding Course Enrollment Decisions

Source of Information	Ask Frequently	Ask Occasionally	Never Ask
Teachers	8%	56%	36%
Counselors	24	54	22
Parents or guardians	37	40	23
Other students	28	48	24

Ethnic groups differed as to their use of the sources of information (see Table 10). Whites and Hispanics placed greatest emphasis on parents and then on other students and counselors. Although Hispanics and whites had the same rankings of frequently asked information sources, Hispanics relied on other students for information almost as frequently as parents. Blacks relied on counselors more frequently than did other students. For Asians, other students were the most frequent information source. All ethnic groups reported that teachers were seldom asked for information regarding course enrollment decisions.

Table 10

Ethnic Breakdown of Information Sources for Course Enrollment Decisions

Source of Information	Percent Frequently Asking Each Source for Information			
	White	Hispanic	Black	Asian
Teachers	5%	8%	14%	8%
Counselors	24	22	33	18
Parents or guardians	41	30	42	28
Other students	27	29	19	34

Students were asked to rate the helpfulness of each of these sources in providing information regarding what courses to take. The results are shown in Table 11. Although students were less likely to go to counselors for information, counselors were rated as the most helpful. Parents were rated as the second most helpful source of information. Teachers and other students were rated as the least helpful.

The student ratings of helpfulness were analyzed for each ethnic group. This information is presented in Table 12. All groups rated counselors as most helpful, followed by parents or guardians. White students rated teachers as less helpful than did Hispanics, blacks, and Asians. Black students gave parents or guardians higher ratings of helpfulness than did other ethnic groups.

Students were asked about the frequency with which teachers, counselors, and parents discussed course enrollments, educational plans, college opportunities, and career goals with them during the 1987-88 school year. The percentage of students indicating that counselors and teachers were involved in these activities with them is shown in Table 13. Because it was important to know what percentage of students had contact with either a counselor or teacher to discuss these issues, that information is also presented in Table 13. Of the sophomores, 81 percent indicated that someone, usually a counselor, had met with them during this school year to plan the courses they would take during the remainder of high school. Students indicated that counselors and teachers were less likely to review their educational plans and their progress; only 62 percent of students indicated that either counselors or teachers had met with them to review their educational plans and progress.

Only fifty-two percent of sophomores indicated that either teachers or counselors had discussed career opportunities or career goals with them during their sophomore year. When a discussion did take place, counselors were more likely than teachers to discuss career goals. Approximately half of the students (52%) indicated that either counselors or teachers had discussed going to college or applying for scholarships with them.

Nearly three-quarters of the students indicated that they were encouraged by their counselors or teachers to take challenging classes. Teachers and counselors were equally involved in this activity. Sixty-two percent of students indicated that they were helped to succeed in challenging courses. As would be expected, teachers were more involved than counsellors in that effort.

The percentage of students indicating involvement by counselors and/or teachers was analyzed separately for each ethnic group. The data are presented in Tables B1 through B3 in Appendix B. It is not possible from this data to determine how much of the ethnic variation is due to school level practices such as special programs designed to increase the number of students preparing for college and how much may be due to other factors such as ethnic differences in the amount of assistance requested and help received. Ratings of counselor involvement in three areas varied according to ethnicity. Black students

Table 11

Student Ratings of Helpfulness of
Various Sources of Information Regarding
Course Enrollment Decisions

Source of Information	Very Helpful	Somewhat Helpful	Not Helpful
Teachers	23%	60%	18%
Counselors	53	36	12
Parents or guardians	37	46	17
Other students	20	55	25

Table 12

Ethnic Breakdown of Student Ratings of Helpfulness

Source of Information	Percent Rating Each Source as Very Helpful			
	White	Hispanic	Black	Asian
Teachers	18%	24%	33%	29%
Counselors	54	51	54	45
Parents or guardians	38	34	47	29
Other students	19	21	17	24

Table 13

Percentage of Students Indicating Involvement with Counselors and Teachers

Activity	Counselors	Teachers	Either Counselors or Teachers
Met with you to review your educational plans and your progress toward them	54%	26%	62%
Met with you to plan the courses you will take during the remainder of high school	79	21	81
Discussed career opportunities or your career goals	47	38	52
Discussed going to college or applying for scholarships with you	40	27	52
Encouraged you to take courses which are challenging for you	58	51	72
Helped you succeed in courses which are challenging for you	32	53	62

reported a higher level of counselor involvement in discussing career opportunities and going to college or applying for scholarships. White students were more likely to report that counselors helped them succeed in courses which were challenging for them.

Ratings of teacher involvement also varied by ethnic groups with black students reporting greater involvement by their teachers in all six activities than did the other ethnic groups. Of the four groups, white students reported the lowest level of teacher involvement.

When the involvement of either counselors or teachers was examined, only two items showed a disparity among ethnic groups. Black students were more likely to report that teachers or counselors discussed going to college or applying for scholarships. Sixty-four percent reported involvement by teachers or counselors compared to only 48 percent of whites and 49 percent of Hispanics. Three of the schools with large black enrollments had programs to increase the numbers of minority students preparing for college, a factor which may have influenced the results for blacks. The other finding illustrating a large difference between ethnic groups involved encouragement by counselors or teachers to take challenging courses. Seventy percent of blacks reported that either counselors or teachers had provided encouragement compared to a low of 56 percent of Asians.

The involvement of parents is shown in Table 14. Over half of the students indicated that they had discussed their plans following high school and their career goals with their parents three or more times during the school year. Over 40 percent of students had discussed course selection, school activities, and going to college at least three times with their parents.

In contrast to the high rate of parent-child discussions, there was little parent-school communication. According to students, over half of the parents had not had a discussion with a counselor or teacher. Sixty percent had not attended a school meeting. Parents have a great deal of influence on students; yet parents have little direct contact with school personnel and may not be well informed regarding either the educational program at high schools or postsecondary options.

The involvement of parents was analyzed separately for the four ethnic groups. These data are shown in Table 15. White and black students reported that they had talked to their parents more frequently than did Asians or Hispanics. The percentage of Hispanic students (38%) reporting that they had talked with their parents about going to college was significantly lower than the percentages for the other ethnic groups. The involvement of parents with the school was lower for Hispanics and Asians than for blacks and whites.

Table 14

Reported Influence and Involvement of Parents in the Education of their Tenth Grade Students

Area of Involvement or Activity	Three or more times	Once or twice	Never
Talked to parents about...			
School activities or school events of particular interest to you	48%	35%	18%
Selecting courses at school	43	42	15
Your career goals	56	31	13
Going to college or applying for scholarships	47	32	21
Your plans following high school such as work or college	60	28	12
Parents have...			
Had a discussion with one of your teachers	6	37	57
Had a discussion with a high school counselor	9	41	50
Attended a school meeting	10	30	60

Table 15

Ethnic Breakdown of the Reported Influence and Involvement of Parents in the Education of their Tenth Grade Students

Area of Involvement or Activity	Percent Responding That Activity Occurred "Three or More Times"			
	White	Hispanic	Black	Asian
Talked to parents about...				
Selecting courses at school	53%	30%	47%	33%
School activities or school events of particular interest to you	55	39	55	31
Your career goals	59	51	62	46
Going to college or applying for scholarships	50	38	59	50
Your plans following high high school such as work or college	64	56	67	54
Parents have...				
Had a discussion with one of your teachers	7	5	11	2
Had a discussion with a high school counselor	10	8	17	2
Attended a school meeting	12	9	12	4

STUDENT ATTITUDES

Students were asked to respond to 12 attitude items representing four areas: course decision making, relevance of their high school education, attitude toward high school, and achievement motivation. A single item addressed students' definition of career goal. Students responded on a five-point scale ranging from strongly agree (5) to strongly disagree (1). The results are presented in Table 16. In the table, the categories of agree and strongly agree are combined into a single positive category; likewise, the categories of disagree and strongly disagree are combined into a single negative category. The results were also analyzed separately by ethnic group. In general, the responses of students showed little ethnic group variation.

Nearly two-thirds of students agreed that there was a counselor or teacher with whom they would feel comfortable talking if they needed help deciding which courses to take. Thirty percent indicated that students were on their own in choosing which courses to take. When asked if their high school counselor had helped them select courses, 56 percent responded in the affirmative. The differences in the area of course decision making by ethnic group were small; however, there was a consistent pattern in which black students had the most positive responses indicating that they were receiving help in course selection.

Over half of the sophomores indicated that high school was relevant to their future plans. Nearly two-thirds reported that they understood the relationship between the courses they take and the options they have after high school, and 12 percent reported that they did not understand the relationship. When the results of these three items assessing the relevance of one's high school education were analyzed separately by ethnic group, Asians were consistently more positive in their responses, and Hispanics were least positive.

Regarding students' attitudes toward high school, most (58%) felt that they were getting a good education at their school, and 11 percent disagreed. Forty percent felt that most of their classes are interesting as compared to nearly one-quarter of students who are bored with high school. Students from different ethnic groups responded similarly to these items.

The most positive response related to the importance of getting good grades; 85 percent indicated that this is important to them. Regarding motivation to work hard, 37 percent of students enjoyed taking classes where they had to work hard. Eleven percent indicated that they chose easy courses in order to avoid hard work.

The attitudes of students were analyzed separately according to their average grades. In general, students with higher grades (A's and B's) consistently had more positive attitudes than did those with lower grades (C's and D's). The items which showed the largest discrepancies related to

achievement motivation. As would be expected, students with higher grades had greater achievement motivation. The areas which had the smallest discrepancies related to course decision making. The area of course decision making was also noteworthy because one of the items deviated from the consistent trend regarding students with better grades expressing more positive attitudes. The item "My high school counselor has helped me select courses" received the lowest ratings from the A students and the highest ratings from C and B students, respectively. There were also differences when the results for this item were analyzed separately for each of the four ethnic groups. Hispanic and Asian students who had the lowest grades, D's and C's, responded most positively to the item, in contrast with blacks, among whom students with the highest grades responded most positively.

Table 16

Student Ratings on Attitude Items

Attitude Items	Percent Agree (5 & 4)	Percent Neutral (3)	Percent Disagree (2 & 1)	Mean	s.d.
Course Decision Making					
If I need help in deciding courses I should take, there is a counselor or teacher I would feel comfortable talking to.	65%	19%	16%	3.7	1.2
My high school counselor helped me select courses.	56	22	22	3.4	1.2
At this school, students are on their own in choosing which courses to take.	30	31	40	2.9	1.1
Relevance of High School Education					
High school is preparing me for employment in my chosen career or for education after high school.	63	22	14	3.7	1.1
I understand the relationship between the courses I take and the options I have after high school.	63	26	12	3.6	.9
My high school courses are directly related to my plans following high school.	50	31	20	3.4	1.1

Note: Students responded on the following scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

Table 16 (Continued)

Attitude Items	Percent Agree (5 & 4)	Percent Neutral (3)	Percent Disagree (2 & 1)	Mean	s.d.
Attitude toward High School					
I am getting a good education at this school.	58%	31%	11%	3.6	1.0
Most of my classes are interesting to me.	40	36	25	3.2	1.0
I am bored with high school.	24	29	47	2.7	1.2
Achievement Motivation					
Getting good grades in school is important to me.	85	12	3	4.4	.9
I like to take classes where I have to work hard.	37	39	24	3.1	1.1
I like to take easy courses so I will not have to work hard.	11	24	64	2.2	1.1
Career Goals					
I have a definite career goal and know what I must do to achieve the goal.	54	29	17	3.6	1.2

Note: Students responded on the following scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

COMPARISON OF RESULTS FOR COLLEGE PREPARATION AND GENERAL EDUCATION STUDENTS

One of the issues addressed by this study concerns whether all students were receiving a challenging educational program. Of particular interest was whether students pursuing a general educational path were receiving the same quality of educational experience as those preparing for college. Of the total sample, 65 percent indicated that the focus of their high school program was college preparation, 26 percent were taking general or regular education courses, 6 percent had a vocational or technical focus, and the remaining 3 percent indicated that their high school had some other focus. As has been discussed, it appeared that some of the students indicating they were college preparatory were not fulfilling all of the college preparation requirements. The results for those students who indicated that they were pursuing a college preparation program but who were not currently enrolled in college preparation classes will be discussed later in this report.

Regarding the background characteristics of the two groups, college preparation and general education students were similar in terms of sex, mobility, and the percentage with jobs. However, of the students with jobs, those taking a general program worked longer hours. As was shown in Table 6, white and black students had similar percentages of students enrolled in college preparation and general education courses. Asian students were overrepresented in college preparation programs, and Hispanics were underrepresented.

There were large differences between the two groups in the educational background of parents and the expectations parents had for the postsecondary education of their children. Students pursuing college preparation had more educated parents than did non-college preparation students. Both groups of students indicated that their parents wanted them to go to college, with students in general education indicating that their parents expected them to attend college but not to graduate. College preparation students indicated that their parents wanted them to graduate from college.

The postsecondary plans, average grades, and math and science course enrollments of college preparation students and students pursuing a general education program are shown in Table 17.

Of college preparation students, 84 percent expected to attend either a 2-year or a 4-year college in the two years following high school versus 49 percent of the general track students. Those in the college preparatory track were more likely to plan attendance at a 4-year rather than a 2-year college.

The grades of the two groups differed, with nearly 76 percent of college preparation students reporting that their average grades ranged from A+ to B- compared to 31 percent of the general education students. Regarding course enrollments, those pursuing a general education program were more likely to be enrolled in lower-level math and science courses than were college preparatory

Table 17

Comparison of Postsecondary Plans, Average Grades, and Course Enrollments of College Preparation (CP) and General Education (GE) Students

Variable	All Students		White		Hispanic		Black		Asian	
	CP	GE	CP	GE	CP	GE	CP	GE	CP	GE
Post high school plans										
Attend a 4-year college	65%	23%	65%	19%	53%	17%	72%	42%	82%	27%
Attend a 2-year college	22	28	24	30	27	29	14	12	8	23
Attend either a 2-year or a 4-year college	84	49	86	48	78	45	85	54	90	69
Average grades A+ to B-	74	31	78	35	63	25	63	22	93	71
Math										
No Math	1	4	1	6	2	4	2	1	<1	0
General/Pre-algebra	11	45	6	45	22	51	13	14	4	20
Algebra	25	26	23	23	30	29	31	20	11	20
Inter./Adv. Algebra	14	4	13	2	10	3	17	10	28	17
Geometry	36	12	43	15	29	7	31	16	35	31
Trigonometry	7	2	8	2	3	1	3	3	13	0
Other math course	6	8	5	9	4	6	4	14	9	12
Science										
No Science	10	16	11	14	15	19	6	10	2	9
Life/Physical Science, Earth Science	14	39	13	37	22	48	10	28	6	17
Biology	56	34	58	35	48	27	58	52	58	54
Advanced Biology	7	2	6	3	7	1	8	1	9	9
Chemistry	7	2	6	1	2	1	9	3	16	6
Other science course	6	7	6	11	5	4	8	6	9	6

Note: The following Ns responded: All Students, CP=1872; All Students, GE=741; White CP=812; White GE=275; Hispanic CP=443; Hispanic GE=299; Black CP=234; Black GE=69; Asian CP=205; Asian GE=35.

students and were less likely to be enrolled in classes such as geometry and biology.

College preparatory students were more likely to have a 4-year plan of the courses they will take throughout high school. A plan such as this may be needed to ensure enrollment in the courses required for college.

College preparatory students were also more likely to have a career goal with 77 percent having a career goal compared to 64 percent for general education students. The career goals of students listed, such as lawyer or mechanic, were classified according to the level of education required. The results are presented in Table 18. Overall, 37 percent chose a career goal, such as beautician, which did not require a 4-year college degree; 43 percent chose careers which require a four-year degree; and 20 percent listed careers which required an advanced degree. However, 48 percent of those taking general education courses also listed a career goal which required a college degree. The lack of congruence between career goals and course enrollments provided additional information that students were not getting the information, guidance, and support they need to select the appropriate high school courses to help them meet their educational and career goals.

Table 18

Career Goals of Sophomores

Education Required for Career Goal	All Students * (N=1925)	College Preparation (N=1305)	General Education (N=419)
Less than a college degree	37%	30%	52%
4-year degree	43	46	38
Advanced degree	20	24	10

Note. These Ns are considerably less than the total Ns in this study. Of the total, only the 65 percent of students who listed a career goal are included.

*This column also included students in programs other than college preparation or general education (e.g., vocational education).

Those in a college preparatory program reportedly sought information from teachers, counselors, and parents more often than did general education students. Similarly, they rated the helpfulness of these groups higher than did general education students.

College preparatory students talked to their parents about school activities, course enrollments, and future aspirations more frequently than did general education students. Parents of college preparatory students were more likely to attend a school meeting but had discussions with teachers and counselors at the same low frequency as the parents of general track students.

Counselors were rated as providing similar levels of service to students with regard to planning high school courses and reviewing educational plans. College preparatory students were more likely to report that their counselor discussed college and scholarships, career opportunities, or career goals and encouraged them to take challenging courses than were general education students. Teachers reportedly were more likely to encourage college preparatory students to take challenging courses and to help them succeed in those courses.

The differences in attitudes between students in general education and those in college preparatory programs were examined. College preparatory students consistently expressed more positive attitudes than did general education students. The absolute difference in the ratings of the two groups is shown in Table 19. The item which showed the greatest difference was "My high school courses are directly related to my plans following high school."

College preparatory students agreed with that item, whereas general education students were neutral. College preparatory students were more likely to enjoy taking classes where they had to work hard. College preparatory students were also more positive concerning the preparation they were receiving in high school for employment in their chosen career or for education after high school. General track students reported less understanding of the relationship between the course enrollment and the options available after high school. Both groups of students reported that getting good grades was important to them, but college preparatory students rated the item higher.

It was interesting to note the items which had the smallest differences. The availability of counselors and others to help select courses was rated similarly by both college preparatory students and general education students, perhaps indicating that counselors were spending equivalent amounts of time with both groups of students.

Table 19

Comparison of Mean Ratings of College Preparatory Students and General Education Students on Attitude Items

Attitude Items	College Preparatory Students	General Education Students	Absolute Difference
My high school courses are directly related to my plans following high school.	3.7	2.9	.8
I like to take easy courses so I will not have to work hard.	2.0	2.7	.7
I like to take classes where I have to work hard.	3.3	2.7	.6
High school is preparing me for employment in my chosen career or for education after high school.	3.8	3.3	.5
I understand the relationship between the courses I take and the options I have after high school.	3.8	3.3	.5
Getting good grades in school is important to me.	4.5	4.0	.5
I am getting a good education at this school.	3.7	3.3	.4
Most of my classes are interesting to me.	3.3	2.9	.4
I am bored with high school.	2.6	3.0	.4
I have a definite career goal and know what I must do to achieve the goal.	3.7	3.4	.3
If I need help in deciding what courses I should take, there is a counselor or teacher I would feel comfortable talking to.	3.8	3.5	.3
My high school counselor has helped me select courses.	3.5	3.4	.1
At this school, students are on their own in choosing which courses to take.	2.8	2.9	.1

Note: There were 1,872 CP students and 741 GE students. Students responded on the following scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree.

COMPARISON OF RESULTS FOR TWO GROUPS OF COLLEGE PREPARATION STUDENTS

Of those students who reported they were taking a college preparation program, 39 percent were not enrolled in college preparatory math or science classes. The survey results for these students who thought they were focusing on college preparation were compared to those students who were actually enrolled in college preparatory courses (real college preparation). Only those items which showed large differences between the two groups will be discussed.

Those actually enrolled in college preparation courses were a substantially different group of students than the group who thought they were college preparatory students. In addition to taking the appropriate college preparation courses, the real college preparation group had higher grades, had better-educated parents, were more likely to have a career goal, and were more likely to plan to attend four-year colleges. Proportionately more of the Hispanic students were in the group of students who were not taking the appropriate college preparatory courses. Blacks, whites and Asians were proportionately represented in both groups of college preparatory students.

It is important to know whether those students who were not taking the appropriate college preparatory courses utilized different sources to get information regarding the courses they should take. The two groups responded similarly in terms of the frequency with which they asked counselors, teachers, parents and other students for information regarding what courses to take. They also responded similarly in terms of the ratings of helpfulness of each of these sources of information. One area where there was a difference between the two groups concerned communication with parents. The real college preparatory group consistently reported talking to their parents more often about issues such as selecting courses at school, their plans following high school, career goals, and going to college.

When the two groups of students were asked a series of questions concerning the involvement of counselors and teachers in their guidance, most of the results were similar. The group of students who thought they were college preparation reported that counselors or teachers were less likely to discuss going to college or applying for scholarships with them.

Twice as many (12%) of the group of students who thought they were focusing on college preparatory reported that they had taken easy courses to keep their grade-point average up in order to be eligible for sports or other activities. The real college preparatory students were more likely to think they were getting a good education at their school. The real college preparatory group also appeared more motivated. They were more likely to enjoy taking classes where they had to work hard and they responded more positively that getting good grades was important to them.

SUMMARY AND RECOMMENDATIONS

A study was conducted to examine the educational aspirations and course enrollment practices of a sample of California high school sophomores. Surveys were administered to over 3,000 students in May, 1988.

The study found that California sophomores had high educational aspirations. Fifty percent planned to attend a four-year college in the two years following high school graduation, with nearly 75 percent indicating that they planned to attend either a two-year or four-year college in the two years following high school graduation. Parental expectations for their children were also high, with nearly 80 percent of students indicating that their parents wanted them to attend college.

There is evidence that for many students their aspirations to attend four-year colleges will not be reached. Of those students indicating that they were focusing on college preparation, 39 percent were not currently enrolled in college preparation math and science courses.

Hispanic students appeared to be at the greatest risk of not attaining a college degree. Hispanics had lower aspirations and lower grade-point averages and were more likely to have undefined career goals than were blacks, whites, and Asians. Even among those Hispanics who indicated they were pursuing a college preparation program, a large proportion of them were not enrolled in the appropriate courses.

Nearly two-thirds of students had a career goal; however, for many students there is a lack of congruence between their career goal and their high school program. Nearly half of the students taking general education courses, rather than college preparation courses, had career goals which required at least a four-year college degree.

The study raises the concern that a small percentage of students may not complete the college preparation sequence because of a need to maintain a minimum grade-point average in order to qualify for sports or other extracurricular activities.

Parents appeared to have a great deal of impact on the courses their children take. Students reported that parents were the most frequent source of information regarding course enrollment decisions and that teachers were seldom asked for information regarding course enrollment decisions.

Students pursuing general educational programs took easier courses, received lower grades, and were less positive concerning their educational experiences than were college preparatory students.

The results for two groups of "college preparatory" students were compared. Those students who reported that the focus of their high school program was college preparatory but who were not currently enrolled in college preparatory courses were compared to those students who were enrolled in college preparatory courses. Those enrolled in the appropriate college preparatory courses were a substantially different group of students than the group who thought they were college preparatory. In addition to taking the appropriate college preparatory courses, the "real college preparatory" group had higher grades, had better-educated parents, and were more likely to plan to attend four-year colleges. Proportionately more of the Hispanic students were in the group of students who were not taking the appropriate college preparatory courses.

Recommendations

It is recommended that at each secondary school, administrators, teachers, and counselors should examine data on student aspirations, course enrollments, and college-going rates for each ethnic minority group in attendance. Targets should be set for improvement; and the strategies to reach improvement goals and the means and time frame for evaluation should be established. The results reinforce the importance of efforts by the California State Department of Education, school districts, and colleges and universities to increase the number of underrepresented minority students, especially Hispanics, preparing for college.

The study repeatedly demonstrated that students were not getting the information they needed regarding course selection. This shortcoming was demonstrated by the lack of congruence between the educational and career goals of students and their course enrollments. Students do not know what is required for various careers. Students need information regarding the needs of the work force in the 21st century, career counseling, and the educational requirements of various careers. In addition, students should be presented with role models from their own ethnic backgrounds and should be informed early that financial aid is available for college. This information should be jointly presented by counselors and teachers and could be incorporated into required courses that are taken by all students or included in courses devoted exclusively to career and educational development that are required of all students. Students need to begin receiving this information in eighth grade and continue receiving this information throughout high school.

Counselors and school staffs need to examine the practices and policies of course placement. In some schools the proportion of students, particularly ethnic minority students, taking college preparation courses is small. These schools may be using standardized test scores, previous grades, and teacher recommendations to place students in courses. However, these practices may be excluding students from participation rather than increasing participation. A related issue concerns the need to provide options to students to allow them to transition from non-college preparatory classes into college preparatory classes. Frequently when students are enrolled in one non-college preparatory class, such

as general math, they are automatically enrolled into other classes in the same track. Students need to be provided opportunities to transition to college preparatory courses through activities such as tutoring, extra coursework, or special courses.

Given the high educational aspirations of students, high school staff and outreach personnel should concentrate their efforts on getting students to enroll and succeed in college preparatory courses rather than simply raising aspirations. The one exception is the need to raise the educational aspirations of Hispanics, which were lower than the aspirations of other ethnic groups.

In preparing students for success in college preparatory courses, advising or counseling needs to be both assertive and supportive. Studies of programs designed to increase the percentage of minority and economically disadvantaged students enrolling in colleges (George, 1987) have found that successful programs have provided support and guidance to students through a staff member, such as a teacher or counselor, who individually monitors and supports each student. Most students responding to this survey did not have regular monitoring and guidance. Students rarely talked with teachers regarding course enrollments, career objectives, or college opportunities. In order to increase the percentages of students enrolling in colleges, particularly economically disadvantaged and minority students, school staff should ensure that students receive individual guidance and support on a regular basis by staff members concerned about each student. Through regular monitoring of course enrollments, schools could help ensure that students were enrolled in courses which would allow them to achieve their aspirations.

Parents have a great deal of impact on the courses their children take. However, most parents have little direct contact with school personnel and may not be well informed about either the educational program at high schools or postsecondary options. Because of the critical influence of parents regarding course enrollment decisions, it is imperative that schools work with parents to prepare them to provide more informed guidance to their children. A booklet, Parents as Partners: Planning Early for Your Children's School Success and College Attendance, a joint publication of the California State Department of Education, the University of California, and the California State University, is a good resource for schools in educating parents regarding planning for college. In addition, schools should encourage ethnic and community organizations to support and encourage high achievement. In order to prepare school staff for increased parent involvement, counselor and teacher preservice and in-service programs need to provide strategies for developing positive relationships with parents.

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APPENDIX A

(Copy of Student Questionnaire)

STUDENT QUESTIONNAIRE
Course Enrollments Study

State Department of Education
Special Studies Unit
721 Capitol Mall, 4th Floor
Sacramento, California 95814
Cathy George (916) 323-6333

Directions: We are asking you to take part in a study that includes students from high schools all over California. Please answer all questions by circling the number that corresponds to your choice or by filling in the blank. There are no right or wrong answers. You do not need to put your name on the survey.

1. What is the name of your high school? _____

   What is the name of your school district? _____

2. What grade are you in? 9 10 11 12

3. Are you male or female?

   1 - male
   2 - female

4. What is your ethnic background?

   1 - American Indian or Alaskan native
   2 - Asian
   3 - Pacific Islander
   4 - Filipino
   5 - Hispanic
   6 - Black - not of Hispanic origin
   7 - White - not of Hispanic origin

5. Have you been enrolled in any other high schools?

   1 - No
   2 - Yes (How many other high schools have you attended? _____)

6. Do you have a job outside of school?

   1 - Yes
   2 - No

   If yes, indicate the average number of hours you work per week:

   0 - Do not have a job
   1 - Work less than 10 hours per week
   2 - 10 to 25 hours per week
   3 - 26 to 40 hours per week
   4 - More than 40 hours per week

7. How far in school did your parents or guardians go?

Mother or Female Guardian	*Father or Male Guardian*	
1	1	Not a high school graduate
2	2	High school graduate
3	3	Some college
4	4	College degree
5	5	Advanced college degree
6	6	Don't know

8. How far in school do you think your parents want you to go?

1 - Not finish high school
2 - Graduate from high school but not go any further
3 - Attend vocational, trade or business school after high school
4 - Attend college
5 - Graduate from college
6 - Attend graduate school
7 - Don't know

9. What are your plans for the first two years after graduation from high school? (Circle the choices that apply.)

1 - Attend a two-year college
2 - Attend a four-year college or university
3 - Get vocational or technical training
4 - Work full-time
5 - Military service
6 - Full-time homemaker
7 - Other (specify _____)
8 - Don't know

10. Do you have a career goal?

1 - Yes (Describe your career goal _____)
2 - No

11. Which of the following best describes the focus of your high school classes?

1 - Preparation for college
2 - Vocational - technical education
3 - General or regular education (without a focus on college preparation or vocational education)
4 - Other (specify _____)

12. Which of the following best describes your average high school grades?

1 - A- to A+
2 - B- to B+
3 - C- to C+
4 - Below C-

13. Indicate the course title that best describes the mathematics course you have taken this school year.

0 = Did not take mathematics this year
1 = General mathematics
2 = Pre-algebra
3 = Algebra
4 = Intermediate or advanced algebra
5 = Geometry
6 = Trigonometry/analytical geometry
7 = Specialized vocational mathematics
8 = Other mathematics class (Name of class _____)

14. Indicate the course title that best describes the science class you have taken this school year.

0 = Did not take a science class this year
1 = Life or physical science
2 = Earth science
3 = Biology
4 = Advanced biology
5 = Chemistry
6 = Other science class (Name of class _____)

15. Do you have a 4-year plan of the courses you will take throughout high school?

1 = Yes
2 = No

16. Has the need to be eligible for sports or school activities ever caused you to take easy courses in order to keep your GPA up?

1 = Yes
2 = No

17. How frequently do you ask the following people for information regarding what courses to take?

	Never Ask	*Ask Occasionally*	*Ask Frequently*
Teachers	1	2	3
Counselors	1	2	3
Parents or guardians	1	2	3
Other students	1	2	3
Others; for example, principal, counselor assistants (specify _____)	1	2	3

18. How helpful are the following people in providing information regarding what courses to take?

	Not Helpful	*Somewhat Helpful*	*Very Helpful*
Teachers	1	2	3
Counselors	1	2	3
Parents or guardians	1	2	3
Other students	1	2	3
Others (specify _____)	1	2	3

19. Since the beginning of this school year, how often have you talked about the following with your parents or guardians?

	Never	*Once or twice*	*3 or more times*
Selecting courses at school	1	2	3
School activities or school events of particular interest to you	1	2	3
Your career goals	1	2	3
Going to college or applying for scholarships	1	2	3
Your plans following high school such as work or college	1	2	3

20. Since the beginning of this school year, how often have your parents or guardians done any of the following?

	Never	*Once or twice*	*3 or more times*
Had a discussion with one of your teachers	1	2	3
Had a discussion with a high school counselor	1	2	3
Attended a school meeting	1	2	3

21. During this school year has your school counselor done the following?

	Yes	No	Don't have a Counselor
Met with you to plan the courses you will take during the remainder of high school	1	2	3
Encouraged you to take courses which are challenging for you	1	2	3
Helped you succeed in courses which are challenging for you	1	2	3
Discussed going to college or applying for scholarships with you	1	2	3
Discussed career opportunities or your career goals	1	2	3
Met with you to review your educational plans and your progress toward them	1	2	3

22. During this school year have any of your teachers done the following?

	Yes	No
Met with you to plan the courses you will take during the remainder of high school	1	2
Encouraged you to take courses which are challenging for you	1	2
Helped you succeed in courses which are challenging for you	1	2
Discussed going to college or applying for scholarships with you	1	2
Discussed career opportunities or your career goals	1	2
Met with you to review your educational plans and your progress toward them	1	2

23. Please indicate your agreement or disagreement with the following statements.

	Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*
High school is preparing me for employment in my chosen career or for education after high school.	1	2	3	4	5
I understand the relationship between the courses I take and the options I have after high school.	1	2	3	4	5
I am getting a good education at this school.	1	2	3	4	5
My high school counselor has helped me select courses.	1	2	3	4	5
Most of my classes are interesting to me.	1	2	3	4	5
I like to take classes where I have to work hard.	1	2	3	4	5
If I need help in deciding what courses I should take, there is a counselor or teacher I would feel comfortable talking to.	1	2	3	4	5
At this school, students are on their own in choosing which courses to take.	1	2	3	4	5
I am bored with high school.	1	2	3	4	5
I like to take easy courses so I will not have to work hard.	1	2	3	4	5
Getting good grades in school is important to me.	1	2	3	4	5
My high school courses are directly related to my plans following high school.	1	2	3	4	5
I have a definite career goal and know what I must do to achieve the goal.	1	2	3	4	5

Thank you for answering these questions.

APPENDIX B

Involvement of Counselors and Teachers
as Reported by Members of Four
Ethnic Groups

Table B1

Percent of Students from Four Ethnic Groups
Indicating Involvement by Counselors

Activity	Student Ethnic Group			
	White	Hispanic	Black	Asian
Met with you to review your educational plans and your progress toward them	56%	51%	56%	53%
Met with you to plan the courses you will take during the remainder of high school	80	76	78	80
Discussed career opportunities or your career goals	48	44	52	38
Discussed going to college or applying for scholarships with you	41	35	49	41
Encouraged you to take courses which are challenging for you	57	58	66	59
Helped you succeed in courses which are challenging for you	27	39	38	31

Table B2

Percent of Students from Four Ethnic Groups
Indicating Involvement by Teachers

Activity	Student Ethnic Group			
	White	Hispanic	Black	Asian
Met with you to review your educational plans and your progress toward them	18%	33%	41%	26%
Met with you to plan the courses you will take during the remainder of high school	14	25	32	25
Discussed career opportunities or your career goals	28	44	55	39
Discussed going to college or applying for scholarships with you	18	30	46	34
Encouraged you to take courses which are challenging for you	46	51	64	57
Helped you succeed in courses which are challenging for you	51	52	60	55

Table B3

Involvement by Counselors or Teachers as Reported by Students from Different Ethnic Groups

Activity	Student Ethnic Group			
	White	Hispanic	Black	Asian
Met with you to review your educational plans and your progress toward them	82%	79%	80%	82%
Met with you to plan the courses you will take during the remainder of high school	71	72	79	74
Discussed career opportunities or your career goals	60	63	66	64
Discussed going to college or applying for scholarships with you	48	49	64	54
Encouraged you to take courses which are challenging for you	59	61	70	56
Helped you succeed in courses which are challenging for you	61	61	66	59

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